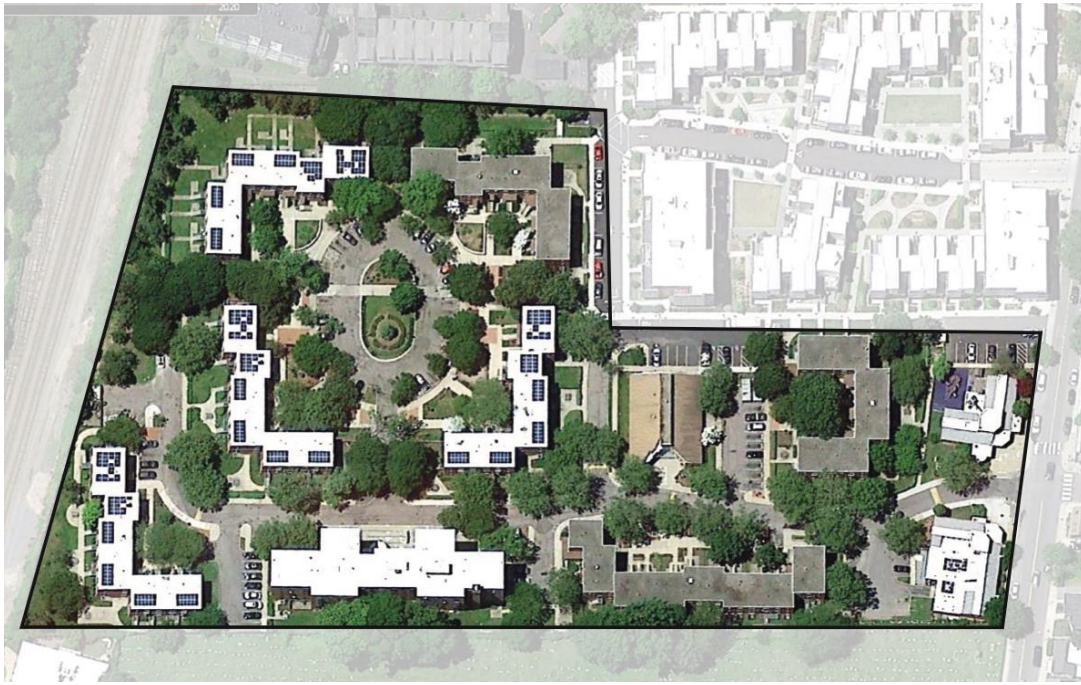


Cambridge Housing Authority REVITALIZATION OF JEFFERSON PARK

Planning Board Affordable Housing Overlay Design Review
November 9, 2021



Existing



Proposed

Agenda

- Project Intro & Timeline
- Site Design
- Open Space & Trees
- Apartment Layouts
- Sustainable & Resilient Design
- Questions & Comments

Project Intro & Timeline

About Jefferson Park

- Built in 1950
- 175 deeply affordable apartments for families
 - 57 apartments are offline due to failing building systems and infrastructure
- Languages: English, Haitian Creole, Spanish, Amharic
- Average income: \$28,000 annually
 - 75% residents < 30% AMI, 16% <50% AMI, 8% < 80% AMI, 1% above 80% AMI
- All residents pay ~30% of their income to rent



Project Timeline

- **2016-2019:** BWA hired, 10 resident meetings
- **Fall 2020:** Funding path identified
- **Dec 2020-Oct 2021:** 15+ resident meetings, 4 neighborhood meetings, relocation began
- **Tonight:** Planning Board design review
- **Winter 2021:** Complete design
- **Feb-April 2022:** Construction bidding
- **Aug 2022:** Construction begins (34-38 months)
- **Mid 2025:** Construction complete



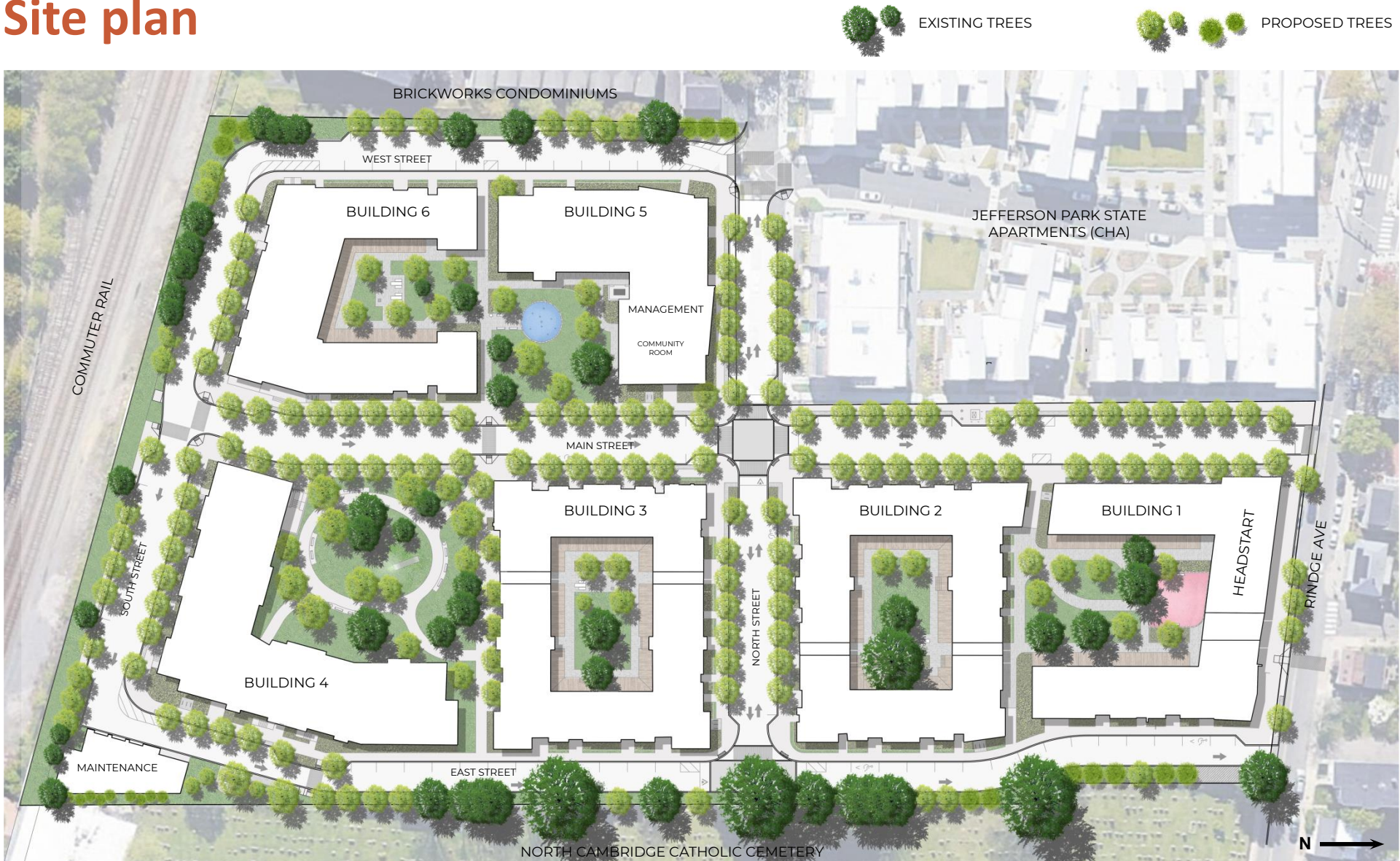
Table sessions with residents to provide design updates, gather feedback, answer questions, and assist with relocation

The CHA has engaged with over 70 residents (60% of households), the majority support the revitalization

- “I can’t wait to see what JP Fed will look like after construction.”
- “The proposed buildings are beautiful. I like that they are different from each other. I like the colors.”
- “We think the patios are a great idea, and the playground is great. The playground makes it a community ... Parents and neighbors can socialize. We like the open space with the trees and park-like atmosphere.”
- “I am happy that there will be more elevator buildings at JP. I would like to live in an elevator building.”
- “We love the trees, but we understand why they have to be removed.”
- “More housing is important. You can never have enough units.”

Site Design

Site plan



- **Response to Context:** Locate new buildings so front yard setbacks relate to neighboring buildings. Consider creating through-block pedestrian or vehicular connections. Site buildings with aim of creating a more coherent streetscape. Create internal courtyards.
- **Open Space & Landscape:** Provide a range of types of open spaces. Maximize canopy trees.
- **Circulation:** Incorporate multiple entrances, locate to address streets. Create vehicle access and circulation routes distinct from paths of pedestrian travel.
- **Massing:** Reinforce the existing or planned pattern of streets and blocks.
- **Sustainable Design:** Passive House certified.

Site context



The surrounding neighborhood contains a diverse range of architectural scales, styles and colors.



Existing: View of Rindge Ave



- **Open Space and Landscape:** Design front yards to frame street as civic spaces.
- **Massing:** Incorporate stepbacks to relate to the scale of the street. Reinforce important street corners with special elements.
- **Façade:** On commercial corridors, clearly differentiate ground floor facades from those of upper floors. Enrich public streets with identifiable, functional building entrances. Provide emphasis at corners of blocks by facade treatment.
- **Circulation:** Create paths for pedestrians from public sidewalk to entrances.
- **Public Art:** Incorporate public art as an integral component.

Proposed: View of Rindge Ave



JP Fed

JP State

Existing: View down “Main Street”



- **Open Space & Landscape:** Maximize canopy trees to shade and enrich streets. Organize front yard landscape elements as a series of layers parallel to the sidewalk to frame civic space and delineate thresholds of privacy.
- **Circulation:** Incorporate multiple entrances. Locate entrances to address streets.
- **Façade:** Provide multiple entrances to individual first-floor units. Provide shelter and shade at building entrances.

Proposed: View down “Main Street”



- **Massing:** Articulate the facades of large buildings into smaller components.
- **Façade:** Where buildings present long facades to the street, give the façade visual interest and create an intermediate sense of scale by incorporating elements such as recesses, projections. Use building massing, form, color, and materials to differentiate the building's base and upper facades; and add special emphasis on the ground façade.

Proposed: View down “Main Street”



Roosevelt Towers is a precedent for “Main Street” (Evereteze Way)



- **Response to Context:** Create through-block pedestrian or vehicular connections. Consider views to adjacent public open spaces.
- **Façade:** Enrich facades with details. Frame streets with street wall facades. Design roofs and top floors as natural extensions of the building massing.
- **Circulation:** Incorporate multiple entrances. Locate entrances to address streets.
- **Massing:** For buildings fronting more than one street, respond to the significance of the streets with orientation and massing strategies that reinforce their distinct characters.

Proposed: “Main Street” & “North Street”



- **Utilities:** Locate utilities where they will be least visible from the street. Where possible, conceal within building. Locate roof mounted equipment away from roof edges and provide parapets with adequate height to screen them.
- **Massing:** Articulate the facades of large buildings into smaller components.
- **Façade:** Enrich streets with identifiable and functional building entrances. Design roofs and top floors as natural extensions of the building massing.
- **Materials:** Natural and durable materials are preferred.

Proposed: Building 6 on “Main Street”



Existing: View along cemetery



- **Response to Context:** Place buildings and design their landscapes to minimize impacts on nearby neighbors and to maintain access to natural light and air.
- **Open Space & Landscape:** Maximize canopy trees to shade and enrich streets. Organize front yard landscape elements as a series of layers parallel to the sidewalk to frame civic space and delineate thresholds of privacy.
- **Circulation:** Consider elevating residential first floors above sidewalk level to enhance privacy.
- **Façade:** Enhance building entrances with features such as stoops, recesses, and landscaping.

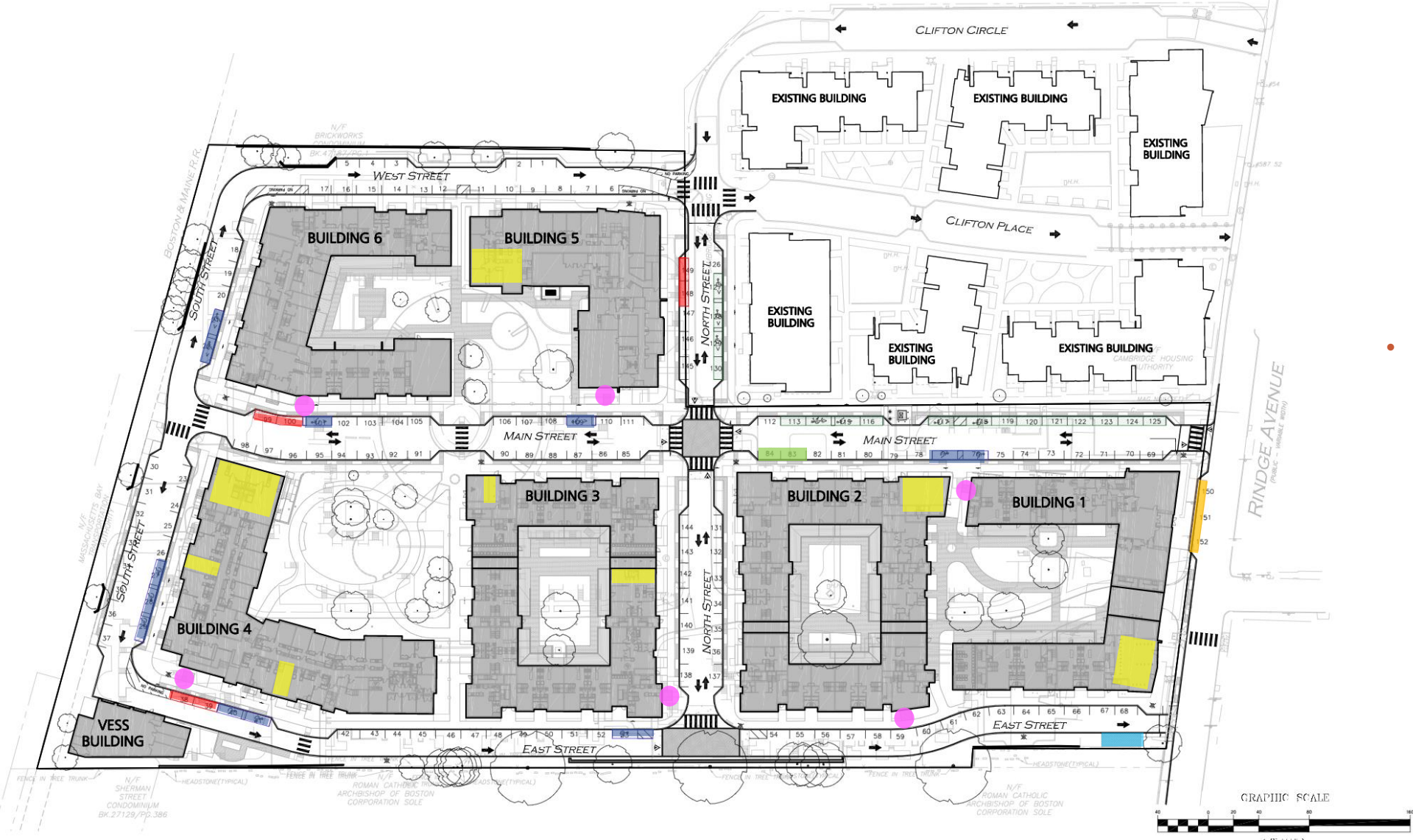
Proposed: View along cemetery



- **Response to Context:** Locate new buildings so front yard setbacks relate to adjacent buildings.
- **Massing:** Articulate facades into smaller components. Divide large developments into separate buildings. In high density areas, frame streets with street wall facades.
- **Façade:** Articulate all four sides of the building. Enrich facades with changes in plane.
- **Utilities:** Locate utilities where they will be least visible from the street. Where possible, conceal them within the building. Locate roof mounted equipment away from roof edges and provide parapets to screen.
- **Sustainable Design:** Employ renewable and low-carbon energy features, such as solar PV systems.

Site massing looking toward railroad, Danehy Park

Proposed: Car & Bike Parking Plan



- Parking:** Separate ground floor bicycle storage from the street with residential units. Develop the layout of parking and driveways to avoid conflicts with pedestrian and bicycle movement. Minimize site area dedicated to driveways and parking. Shade parking with canopy trees.
- Circulation:** Create vehicular routes that are distinct from paths of pedestrian travel. Minimize the number and widths of curb cuts.

Open Space & Trees

Proposed design increases usable open space

Existing



- Small, fragmented spaces
- Few potential uses
- Strongest potential courtyard dominated by parking
- Largest spaces at periphery, underutilized

Proposed



- Large, contiguous spaces
- Many potential uses
- Largest open spaces at core, away from cars
- CHA has successful precedents (Lincoln Way, Roosevelt Towers)

- **Response to Context:**
Where site dimensions allow, consider creating internal courtyards and semi-enclosed courtyards open to the block interior.
- **Open Space & Landscape:**
Provide a range of types of open spaces. Provide opportunities for enjoyment of nature, such as gathering places and play spaces for residents. Provide seating to foster social connection. Consider locations at building entrances, courtyards, and along paths connecting different areas of the site. Use permeable surfaces wherever possible for pedestrian pathways.

Open space is designed to support a variety of uses

Building 6:
8,700 sf
courtyard

Building 4:
24,000 sf
community
park

Easement
for future
multi-use path



Building 5:
10,000 sf
play area

Buildings 3:
8,100 sf
courtyard

Buildings 2:
8,100 sf
courtyard

Building 1:
14,200 sf
play area

Courtyards

Private decks and
shared yard



Lawn with
trees



Grills and
tables



Community Park

Trees and
benches



Embankment
slide



Loop path for
walking, kids bikes



Play Areas

Splash
pad



Play equipment
for young kids



Play area
surfacing





- **Response to Context:** Create internal courtyards and semi-enclosed courtyards open to the block interior.
- **Open Space & Landscape:** Provide opportunities for enjoyment of nature, such as gathering places and play spaces for residents. Provide seating to foster social connection. Use permeable surfaces wherever possible for pedestrian pathways. Minimize urban heat island effect by preserving existing mature canopy trees wherever possible and by planting new ones to shade buildings, open spaces, and paved surfaces.

Courtyard at Building 3



- **Response to Context:** Create internal courtyards and semi-enclosed courtyards. Place buildings and design landscapes to minimize impacts on nearby buildings and maintain their access to natural light and air.
- **Open Space & Landscape:** Provide opportunities for enjoyment of nature, such as gathering places and play spaces for residents. Provide seating to foster social connection.
- **Massing:** Articulate the facades of large buildings into smaller components.
- **Façade:** Enrich streets with identifiable and functional building entrances.

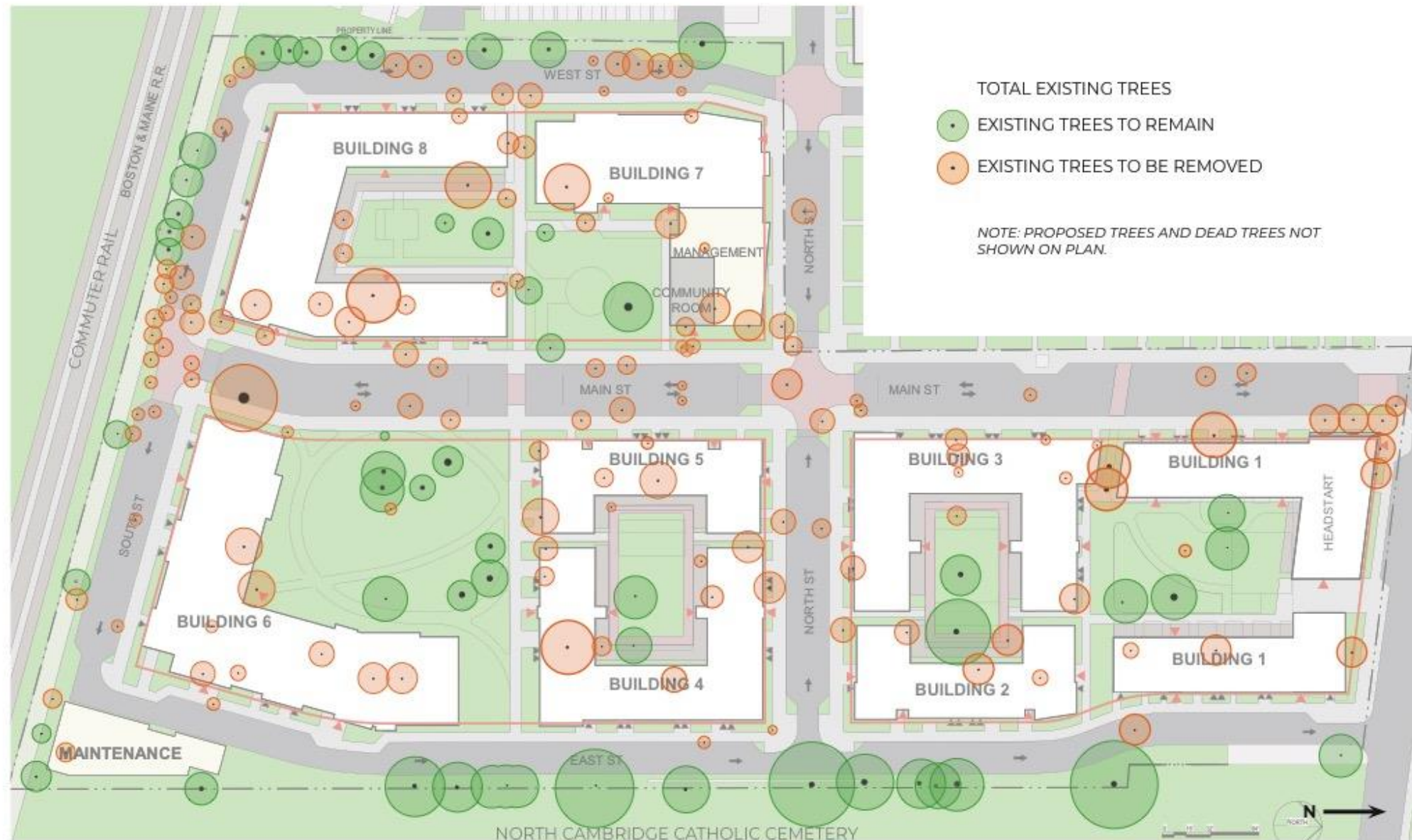
Community Park at Building 4

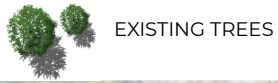


- **Response to Context:** Create internal courtyards and semi-enclosed courtyards. Place buildings and design landscapes to minimize impacts on nearby buildings and maintain their access to natural light and air.
- **Open Space & Landscape:** Provide opportunities for enjoyment of nature. Provide seating to foster social connection. Use permeable surfaces wherever possible.
- **Facades:** Where ground floor accommodates community space, maximize views of interior spaces.

Play Area and Community Room at Building 5

Design removes and replaces 151 trees, 51 trees to remain



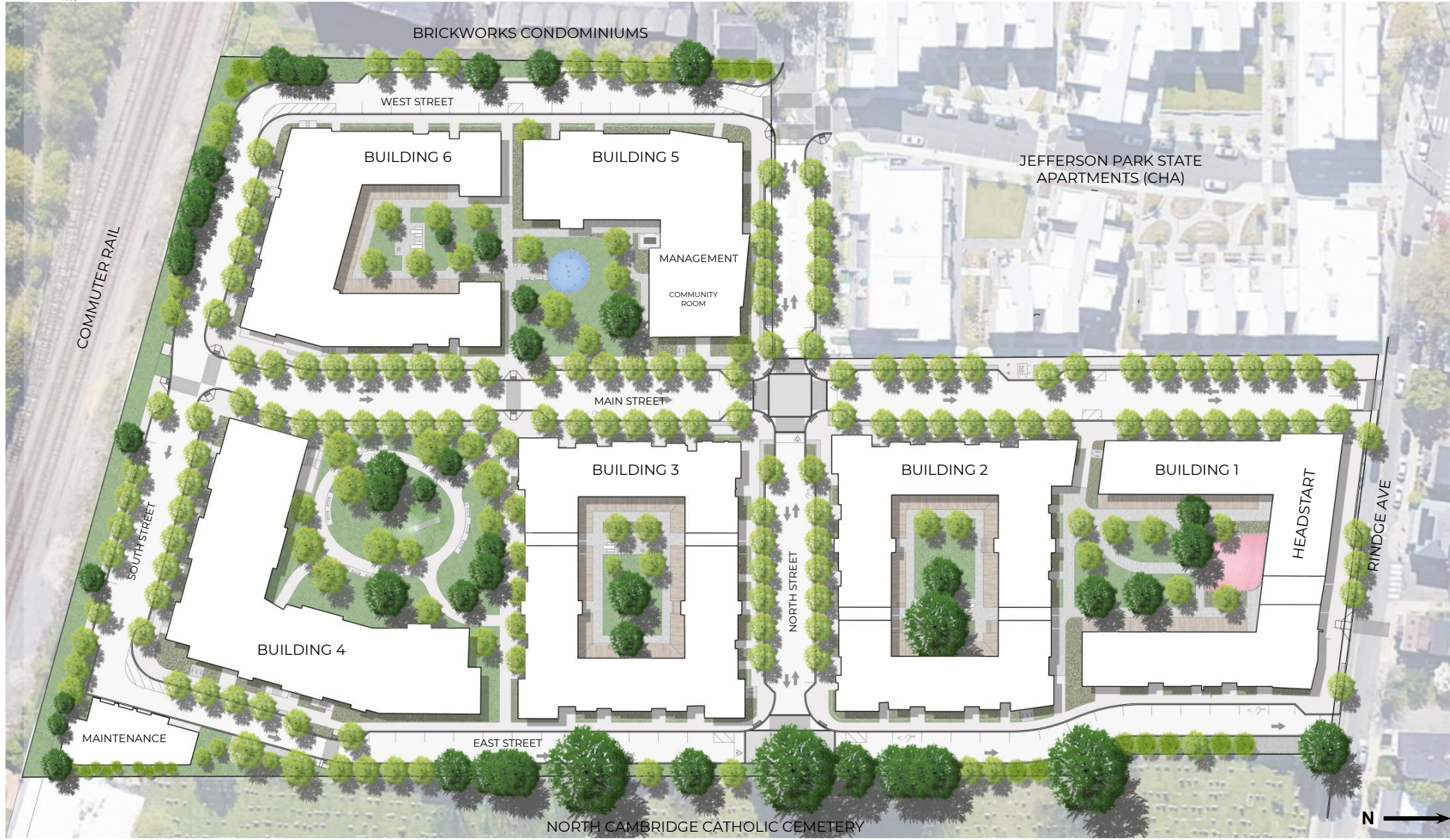


EXISTING TREES



PROPOSED TREES

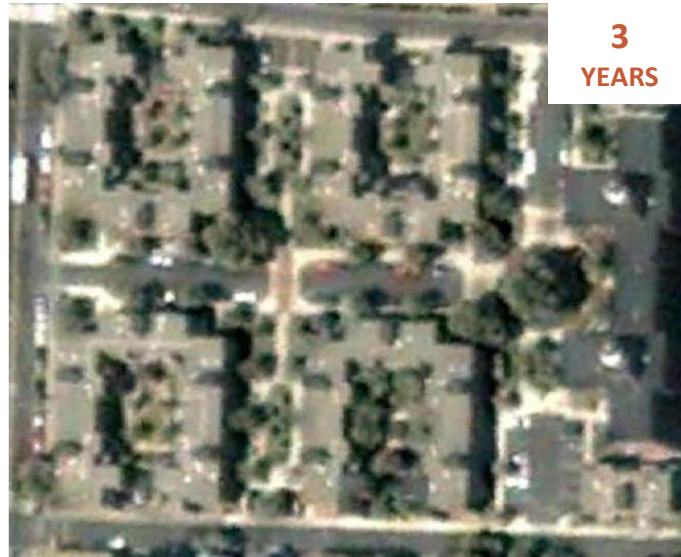
Note: Proposed trees shown at 10-year maturity



- **Open Space & Landscape:** Design open spaces to maximize canopy trees to shade and enrich streets and other open spaces. Minimize the urban heat island effect by preserving existing mature canopy trees wherever possible and by planting new ones to shade buildings, open spaces, and paved surfaces. Follow the recommendations of the City's Urban Forest Master Plan for species, planting standards, and care. Select species for low plantings that are appropriate for urban conditions.

Design preserves 51 trees to remain, plants ~220 new trees (net gain of 69)

Investing in a healthy canopy



New trees planted at Roosevelt Towers in 1998 when the site was redeveloped grew quickly. Photos above are from 2001, 2007 and 2017.

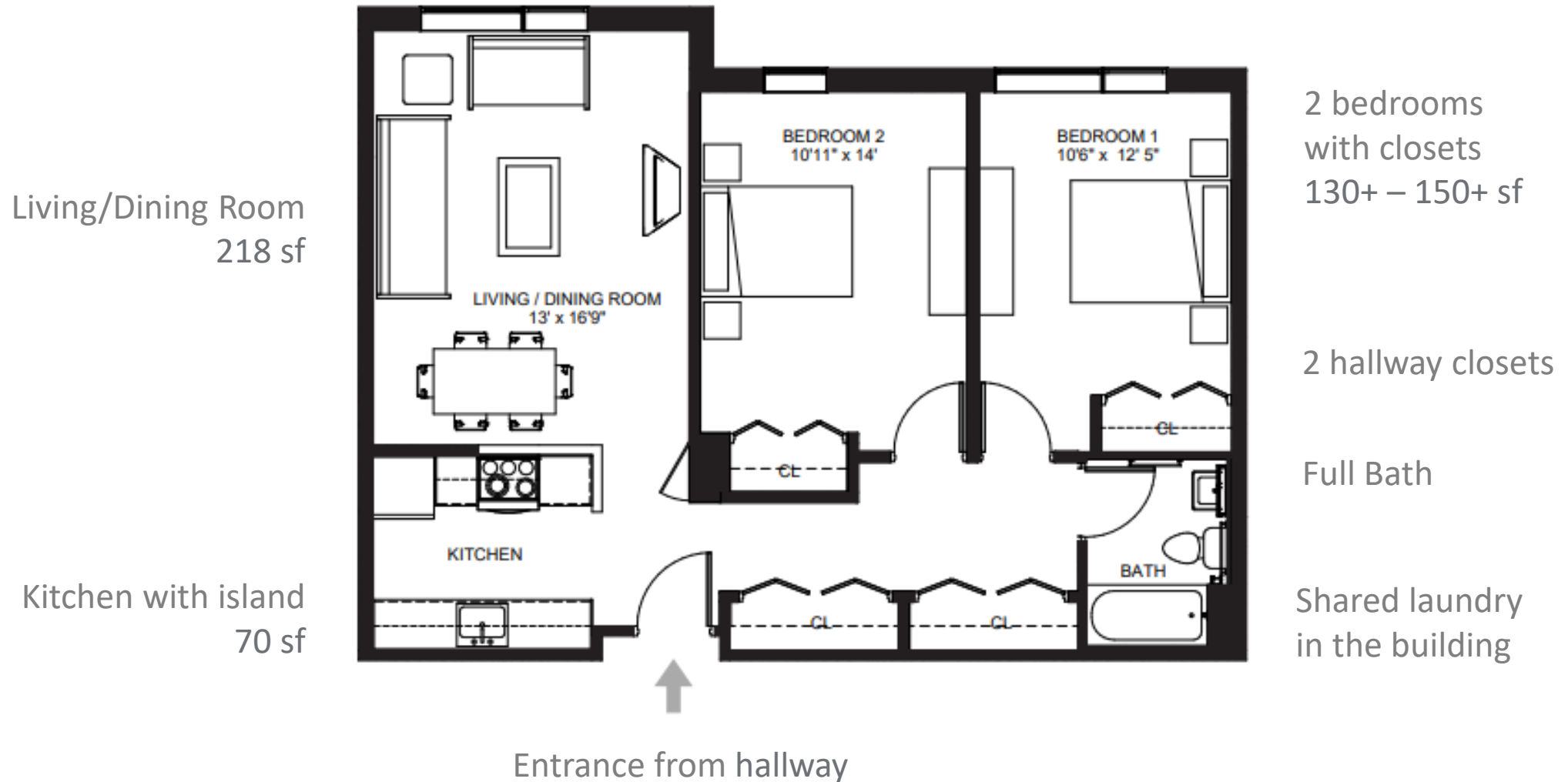
Apartment Layouts

Average apartment sizes are growing

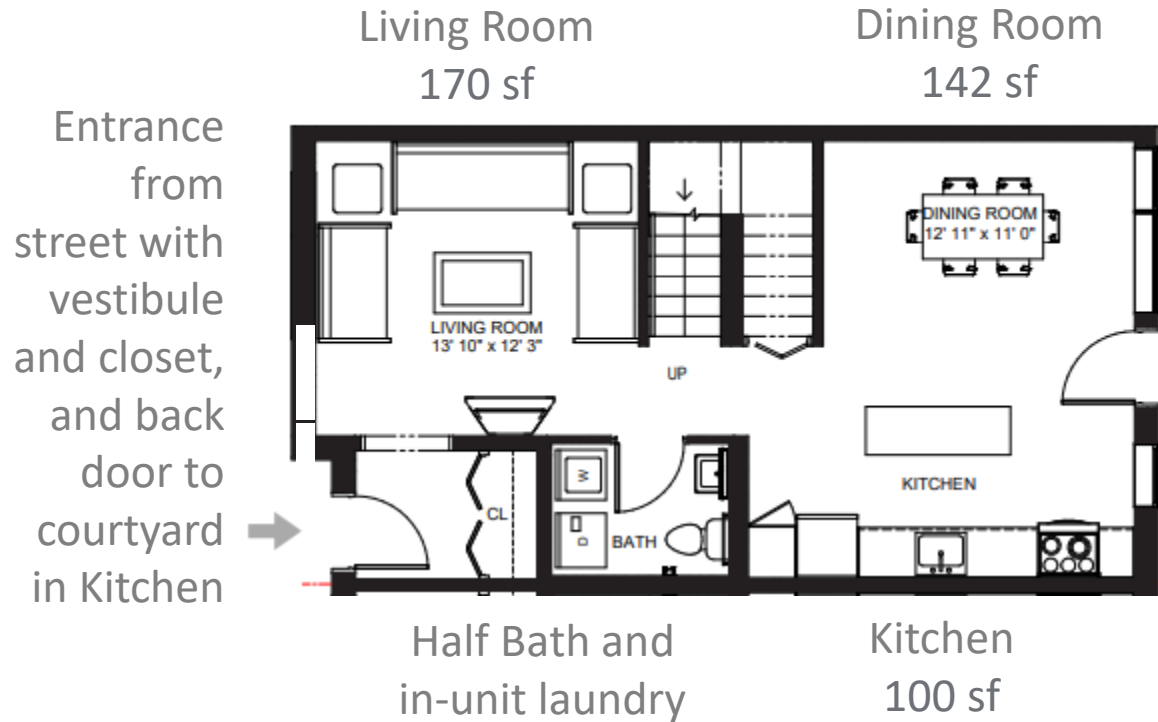
Unit Type	# of Units	# of Adaptable Units	Existing (Average Size)	Proposed (Average Size)
1-bedroom	37	21	663 sf	625 sf
2-bedroom	111	60	823 sf	894 sf
3-bedroom	111	43	1,018 sf	1,173 sf
4-bedroom	18	4	1,428 sf	1,487 sf
5-bedroom	1	1	N/A	2,079 sf
Total	278	129		

- **Building Interiors:** Provide a mix of unit types and sizes that contribute to the diversity of housing in the neighborhood. Provide a significant number of units suitable for families with children. Design living spaces to be attractive and comfortable. Include adequate storage, and access to natural light and air. Size bedrooms to accommodate standard bedroom furniture. Provide ample counter space and storage in kitchens. Provide access to laundry facilities in units or elsewhere in the development. Utilize interior finishes and fixtures that are high quality, durable, sustainable, and energy-efficient. Use operable windows.
- **Facades:** Provide entrances to individual first-floor units.
- **Materials:** Strive for divided light or multiple pane windows.

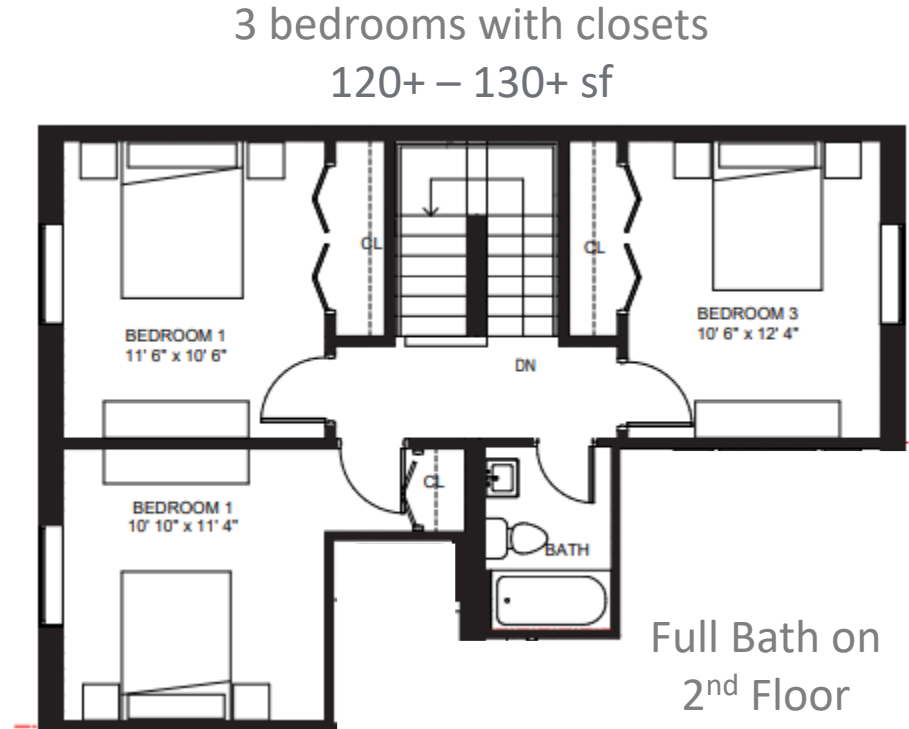
Typical 2-bedroom, 1 bath apartment (830 sf)



Typical 3-bedroom, 1.5 bath townhouse apartment (1,224 sf)



First Floor



Second Floor

Sustainable & Resilient Design

Resiliency

- Eliminate basement apartments
- All units built above 2070 100-year flood plain
- Relocate mechanical equipment to roofs
- Provide storm water control and infiltration
- Central AC and operable windows in all apartments

Sustainability

- Passive House & Enterprise Green Communities certified
- All electric HVAC, gas hot water (ready for conversion)
- Rooftop solar panels
- Healthy materials
- Reduce greenhouse gas emissions by over 50% (equal to planting 24,000+ trees annually)

- **Sustainable Design:** Avoid locating critical building functions in areas that are at risk of future flooding. On roofs, exterior walls, and paved surfaces, use materials to minimize heat absorption and localized heat island effect. Employ renewable and low-carbon energy features where feasible. Select and design building systems and equipment within units to facilitate future conversion to all-renewable energy systems. Use materials with no volatile organic compound emissions in all walls, floorings, ceilings, furniture, acoustic and thermal insulation, and facades exterior applied products.

Creating high quality housing with the Affordable Housing Overlay

- **Unit Mix:** 278 affordable apartments (103 new), almost 50% 3-bedroom or larger
- **Open Space:** Increasing usable open space, and net gain of ~69 trees
- **Resident Comfort:** Larger, healthier, more comfortable apartments
- **Sustainability:** Passive House, Net Zero (all-electric conversion) ready
- **Site/Building Design:** Based on successful precedents, AHO design guidelines
- **Engagement:** 25+ meetings with residents, 4 neighborhood meetings





Thank
you!





NOTE: PROPOSED TREES SHOWN AT 20 YEAR MATURITY.



Site Plan

